

**Installation Suggestions for:** 

# RLP Mini Low Profile V Track Hardware sliding door hardware/ barn door track

- Read these instructions to end before starting installation or ordering hardware.
- Reclaimed Lumber Products (RLP) warrants this hardware is free of defects and is guaranteed
  for ten years if installed properly. Customer misusing hardware voids warranty. Hardware
  must be installed correctly in appropriate application with supplied materials. There must be
  appropriate structural backing and support to hold screws which mount track. Track failure is
  most likely to happen from incorrect or insufficient attachment of screws to wall. RLP is not
  liable for any accidents or damage caused by incorrect or insufficient installation. Warranty
  does not cover normal wear on finish especially where wheel rides on track.
- Track is rated for up to 375 lbs. total hanging on track. Do not allow persons to hang on door and slide on track. All structural support must be solid enough to support load. <u>Attachment only to paneling or wallboard is not sufficient to hold track.</u> Mounting screws must sink into studs or wood headers. A continuous solid wood header is preferred.
- RLP is not liable for any accidents or injury resulting during the installation of this product.
   Customer and installer should take proper safety precautions when using hand tools and power tools. It is up to the operator to know how to use tools properly, safely, and effectively.
- This hardware is not recommended for exterior installation.
- RLP takes pride in their products. Please provide pictures and feedback of your finished product. Thank you for choosing RLP.

#### **Reclaimed Lumber Products**

3424 North Can Ada Road, Nampa, Idaho 83687 208-412-7823 www.reclaimedlumberproducts.com

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### **Components List**

- Track
- 4" lag screws (black have 5/16" head or silver have 3/8" head). Here are the recommended numbers of lag screws for each length of track: 6', 5 holes; 7', 6 holes; 8', 7 holes; 105", 7 holes; 10', 8 holes; 12', 10 holes; 13', 10 holes; 14', 11 holes; 20', 15 holes...
- End stops: two 5/16" x ½" button bolt with acorn nuts.
- Two carrier/ hanger assemblies. Note axle bolt is in the hole that is 3/4" from the top of the hanger plate. Additionally there should be four 3/8" bolts, eight washers, and four acorn nuts to mount hanger plate to door. Door mounting bolts are usually 1/2" longer than the thickness of the doors.
- 3" long x 1" tall floor guide and two mounting screws.
- Two wood 1/4" thick x 1 1/8" wide spacer blocks for setting carrier assemblies on door to drill for mounting holes in door.

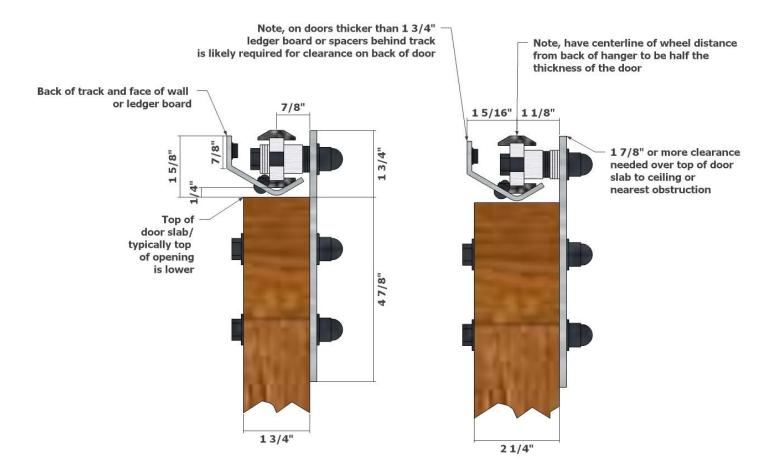
#### **Tools Needed**

- 3/16" allen wrench
- 9/16" & 5/8" socket or wrench
- 5/16" or 3/8" nut driver for drill or socket for mounting lags depending on which lag came with kit; silver lags are 3/8"
- Drill, punch, ¼ 5/16" drill bit if mounting holes need to be drilled in track, 1/8" drill bit to predrill for lags and floor screws, 3/8" drill bit for boring holes in door
- Level
- Pencil
- Tape measure
- Stud finder
- Philips screwdriver or bit for drill
- 1/4" slotting cutter and router or circular saw
- Step ladder
- Clamp
- Safety glasses and other proper safety equipment and precautions

#### **Clearances Needed**

• 1 5/16" to centerline of wheel from wall on track puts the back of a 1 ¾" thick door at roughly 7/16" off wall with bolt heads barely clearing. 2 ¼" thick door is 3/16" off wall, and the bolt heads will not clear unless you countersink. These measurements are from the back of the track which mounts to the wall. Make sure that the back of the door and bolts will not rub on any trim, thermostats, pictures or anything within the full range of opened and closed door positions. If you do not have enough clearance, you can also add a ledger board behind the track as a spacer; make sure this is securely mounted so as to not compromise the attachment of the track to the wall. An 1 3/4" thick door or thicker will not work without a spacer behind the track or additional spacers added between hanger and wheel if there is any trim or other

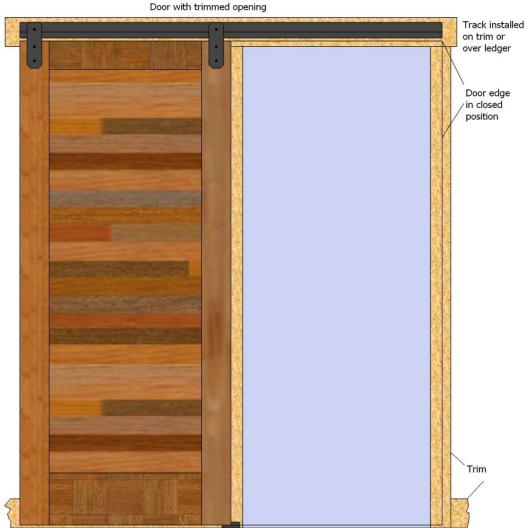
- obstructions for bolts to rub. Bolts will need to be countersunk into back of door or add spacers.
- The default setting to centerline of wheel is 7/8" from back of hanger. Move washers around on axle if necessary to have center of wheel from back of hanger plate to be half the thickness of your door so the door is centered front to back under the wheel. One can also adjust how well the door hangs plumb by moving the spacers on the axle, but make sure both wheel assemblies have equal number of washer spacers on both sides of wheel. If door is hanging to where bottom of door is leaning into the wall remove spacers between wheel and hanger. Floor guide will be necessary to make door hang plumb.
- Clearance under the door is recommended ½" ¾" and must have a minimum of ¼". Over the top of the door slab 1 7/8" clearance is needed for wheel to spin freely.



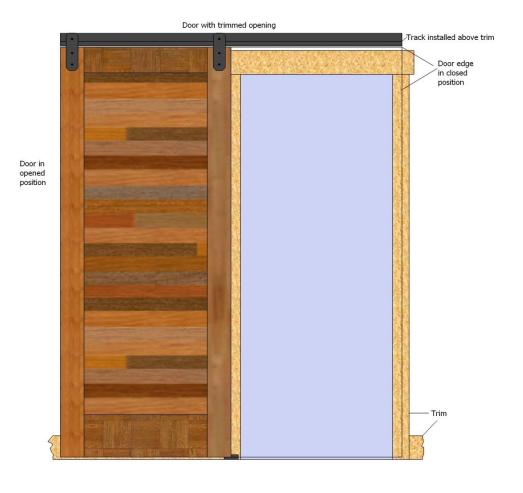
## Sizing Sliding Door Slab to Finished Opening

- We recommend a minimum of 1" of overlap on all three sides. The drawings on the next page show 2" on sides, 1" on top, and ½" gap under door for demonstration purposes.
- More overlap ensures the door will cover the opening better and not allow as much gap to show around the edges even if not shut fully.
- To calculate door slab width on single door add overlap on side times two plus inside dimension of opening.
- To calculate door slab width on pair of doors take half of inside dimension width and add one side of overlap dimension for each door slab.
- Typically the track length is twice the width of the door. Sizing doors in increments that work
  exactly with standard track length makes the process simpler such as using a 3' door with a 6'
  track.

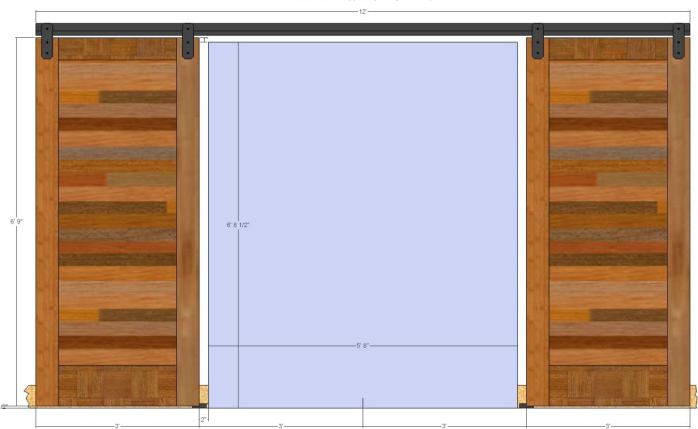
- To calculate door slab height take inside opening height subtract desired gap under door and add desired overlap on top. This could place the track over any trim that is over the top of the opening. Either the door slab needs to be adjusted in height so track can go above trim or trim needs to be flat and fully extend for full width under track so track can be mounted on trim.
- Note all these dimension are easier to calculate if opening is just a sheetrock opening with no trim. You need to consider what the trim will look like with door in open and closed position. How much of the trim do you want showing if any at all?
- For door height be sure to consider where the mounting lags need to go for mounting the track to the wall. They will be centered about 1 3/16" over top of door slab. Be sure there is proper backing and load support for lags to attach to at these points.



Floor guide centered on track



Double Doors with sheetrock wrapped opening and only baseboards



## **Installation Steps**

1. Decide how you want the floor guide to be installed.



If you want the alternative option shown in picture with double guides, be sure to order an extra floor guide. Otherwise cut a 1/4" wide kerf centered in bottom of door. To determine depth of kerf cut, subtract desired gap under door from 1" and add 1/16", so for a ½" gap under door you would have a 1/4" wide and 9/16" deep slot/ kerf. This is easiest to do with a router and a slot cutter.

Have vertical part of floor guide centered in the same plane as the door for setting distance off wall. Be sure to reference off same point on the wall plane that track is mounted on; do not reference off face of baseboard. The points need to be aligned or door will not hang plumb. Center of door and center of vertical part on floor guide need to align. To find that vertical center point of door measure from back of door to wall and add half the thickness of the door. If floor guide's screws are going into material other than wood such as concrete in the floor, you will need to use different and appropriate fasteners.

On a single door the guide is centered on the track from left to right. In any case, the door needs to cover at least half the floor guide whether it is in the full open or fully closed position. Install the floor guide to the floor. If the door properly overlaps the opening, then the floor guide should not protrude into the opening.

2. If you mount centerline/bolt holes of carriers 2 3/8" in from edge of door, this will have edge of door stop flush at end of track based on predrilled stop holes in track. The stop bolt hole is drilled 1 1/2" in from end of track to center of hole. Utilizing our predetermined pattern plywood spacer block (only works with rectangular shaped hanger) with edges of carrier 1 1/8" from edge of door (bolt holes 2 3/8" from edge of door is center of carrier) will allow for a track to work that is exactly twice the dimension of the door slab. Here is a formula you can plug in different values if you like to calculate track length: (Door Width) + (Distance From End Of Track To Center Of Stop Bolt Hole) - (Distance From Edge Of Door To Center Of Carrier) + 0.875" = Track Length / 2 For double doors on a single piece of track just don't divide the formula by 2 at the end.

You can plug different scenarios into the above formula to calculate all different options to make the track work for your door size. The 5/16" stop hole can be re-drilled in another spot if would like to change mounting points or have door stop in different spot on track. For example you could redrill 5/16 holes 3/4" in from end of track and still mount carriers 1.1/8" in from edge of door; this would allow you to use a 48.3/4" door with an 8" track (48.75 + .75 - 2.375 + 0.875 = 96.2); with this option your door would stick past the end of the track 3/4". Also you could mount the carriers 4.375" to center of carrier and utilize an 8" track for a 50" wide door without changing stop holes (50 + 1.5 - 4.375 + 0.875 = 96.2). Make sure to consider how the carriers will look in relation to the frame on the door regardless of where you choose to mount them. On double doors with a single track you can also add extra stop bolts in center of track to make sure doors stop in the middle.

Make sure complete carrier/hanger assembly is assembled with wheel, spacers and hanger. Normally the distance from back of hanger to center of wheel is approximately half the thickness of the door. Refer to the cross section drawing on page #3. Be sure to have the bolt that is the wheel axle in the appropriate hole. This hole is 3/4" from the top of the hanger. The washer that goes under the 3/8" acorn nut on the front of the hanger is the same size as the washer supplied with the two pair of mounting bolts used to mount the hangers to the door.

Using supplied plywood guides, flush one piece up against edge of door to get distance of 1 1/8" from edge of door to edge of carrier bracket (only works with rectangular shaped hanger) and the other piece flat against top of door. Then hold complete assembled carrier with wheel attached tight to edge of piece on face of door and wheel tight to piece flat on top of door. The dimension from bottom of wheel to top of door is critical that it stays this recommend gap of 1/4" (the thickness of the plywood). This is a safety and proper functioning issue. This gap makes sure that the door and carrier assembly fit on track properly, slide smoothly, and do not "jump off" track. Holding these three pieces secure, temporarily clamp carrier/ hanger assembly to door making sure to leave two bolt holes clear. Make sure to have wheel side of carrier facing to center of door and verify that carrier's metal strap is square to door.

Use 3/8" drill bit to drill both mounting holes in the door slab using the steel carrier plate as a guide. Be sure to drill straight and perpendicular to door face. Now repeat procedure for the other side.

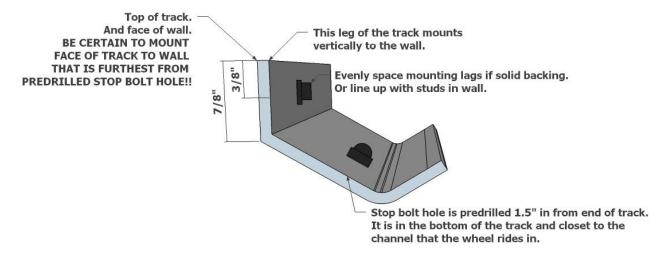
NOTE: The above step for using the plywood guide on the face of the door will not work with the arrow, horseshoe, or any custom shaped carriers; With these just measure from edge of door 2 3/8" to center of bolt holes or whatever you decided would be your centerline. You must still use the plywood spacer to set wheel height above door, though.

NOTE: You can order track that is any length you want even though the rule of thumb is twice the door width. If you don't have room for this, and you have made all the adjustments you can by moving carriers and end stops then the door just won't fully open from closed position on too short of a track. Alternatively you can order track longer than you need if it helps with finding better attachment points for mounting lags; the end stops can be reinstalled to stop the door short of where it normally has the door edge flush with end of track. If the track is ordered and installed too long between stops (twice the door width) the floor guide won't function properly. In this case you may want to order and install multiple floor guides so the door slab does not jump off a floor guide in the situation where the travel distance for the door is greater than twice the door's width.

NOTE: Washers on axle can be moved behind or in front of wheel to change clearance from wall for relationship distance of back of hanger/ carrier to center of track and wall. This also

can help adjust a door to hang more plumb. Be careful that floor guide is centered front to back on door if you make any adjustments in the axle assembly.

- 3. At this point you may want to consider painting, staining, or finishing your door slab if necessary. Allow proper curing before handling door.
- 4. Determine distance from floor to top of track by adding gap under door + height of door slab + 1 5/8" (reference drawing at beginning of instructions). This top of track mark will line up with vertical top piece on back of track that mounts to wall. Mark this measurement on wall on each end of track location. Verify and adjust if need be with a level. Mark where end of track will be. This top of track mark is not the top of the wheel; the top of track is slightly lower than the top of the wheel.



Note you want track installed level, but floor may not be level. Verify height points from floor along full length of track to be sure you have proper clearance. Keep track level and raise height if need be to get clearance. Also be sure that floor guide will reach door properly after setting height of track.

If you have solid, structural, and continuous backing for the full length of the track then you can evenly space the mounting holes for the lag screws. Otherwise, locate all mounting points within full length of track on wall. Use stud finder if need be and mark each point on wall that is going to be a mounting point. With extra set of hands hold track up against wall and transfer mounting hole marks to track. If you cannot hold track up against wall, measure from one constant end to each hole. We recommend a minimum of five lags per section of track and spacing of around 16". Before drilling track be sure that you are drilling in the correct leg of the track that is supposed to be mounted to the wall. Both legs look similar. The bottom of the track has the stop bolt hole closest to it. The section that you will drill for the wall lags is furthest from the stop bolt holes. Drill 1/4" diameter holes from backside of track so you do not mar the finish. It is best to start hole with a steel punch for ease of starting drill bit. Center holes 3/8" down from top of track (reference drawing at beginning of instructions). Remember all mounting holes need to be in structural support. With drilled track verify it matches mounting points mark on wall. Install lag in each end of track (if installing by yourself it might be easier to mount one lag in the center of track instead of each end); be sure top of track mark on wall lines up with top of track. Note longer length tracks might be bowed. As you install the lags you can take this bow out of them. Be sure that your top of track marks on wall are straight and level; be sure to mount the track to these marks. Do not install track with any bow left in it. Now you can predrill with 1/8" bit all holes and install all lag screws checking to be sure track is still straight and level with each hole.

Install stop with  $5/16 \times 1/2$ " button head bolt and acorn nut in one end of track. Be sure head of bolt faces down and acorn nut faces up in valley that wheel rides. Leave most accessible side of track open.

- 5. Bolt carrier with 3/8" bolts to door. Use acorn nuts on front, carrier side of the door. If you have clearance issues in the back you may need to cut bolts shorter or substitute so they work with acorn nuts. Normally the bolts sent with your kit are 1/2" longer than the thickness of the door. If you tell us in advance in your comments on checkout that you intend to countersink the bolts, we can substitute shorter bolts that are only 1/4" longer than the thickness of your door.
- 6. Now for the fun! Slide door onto track on free end of track without stop bolt. Install other stop bolt. If the end of the track is not accessible, take the wheel and axle off the carrier assemble, set door in front of track, and re-attach wheel and axle with spacers onto back of hanger plates after door is sitting in position at correct height below track. Do not slide or operate door without both stop bolts installed in each end of track.
- 7. Congratulations; you did it! Enjoy. It will last a long time.

Please tell your friends where you bought this innovative low clearance track kit.